

---

**REMARKS**

Claims 1-23 are currently pending in the subject application. Claims 21 and 22 have been amended herein. A clean version of all pending claims is found at pages 2-5 of this Reply. A version with markings to show the amendments made is found at page 8 of this Reply. Favorable reconsideration of the subject application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 1-23 Under 35 U.S.C. 102(e)**

Claims 1-23 stand rejected under 35 U.S.C. 102(e) as being anticipated by Brobst *et al.* (U.S. Patent No. 6,053,409). It is submitted that this rejection be withdrawn for at least the following reasons.

Brobst *et al.* does not disclose a beam expander for reflecting a second portion of a light beam onto a target, as recited in independent claims 1, 15, and 23. A beam expander, as described in the subject application, provides for an expansion of a light ray from a light source thereby further amplifying a scanning field size achievable with a piezoelectric material, which may have a fixed maximum displacement (p. 14, lines 12-21). In the Office Action dated February 27, 2002, the Examiner relies on an oscillating mirror 129 of Brobst *et al.* as being equivalent to the beam expander of the subject application. However, the oscillating mirror 129 of Brobst *et al.* is actuated by a motor for producing a scanning beam (col. 5, lines 1-4). The oscillating mirror 129 of Brobst *et al.* does not provide for an expansion of a light ray, as does the beam expander of claims 1, 15, and 23.

Regarding amended claim 21, Brobst *et al.* does not disclose a mirror being oriented so as to reflect a second portion of said light beam from a reflector through an aperture onto a target, whereby said light beam is expanded by the mirror. Instead, Brobst *et al.* describes a light reflected from a polygonal scan mirror to a collecting mirror, focusing optics, and a photodetector. Expanding the light beam is absent from Brobst *et al.*

Because Brobst *et al.* does not describe each and every element of claims 1, 15, 21, and 23, Brobst *et al.* does not anticipate claims 1, 15, and 23. Claims 2-14, 16-20, and 22 respectively depend from claims 1, 15, and 21. Accordingly, withdrawal of this rejection and allowance of claims 1-21 and 23 are respectfully requested.

## II. Conclusion

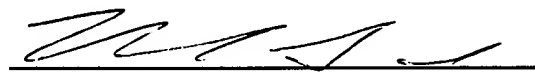
The present application is believed to be in condition for allowance in view of the herein comments and amendments.

If any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

AMIN & TUROCY, LLP



Himanshu S. Amin  
Reg. No. 40,894

AMIN & TUROCY, LLP  
24<sup>TH</sup> Floor, National City Center  
1900 E. 9<sup>TH</sup> Street  
Cleveland, Ohio 44114  
Telephone: (216) 696-8730  
Facsimile: (216) 696-8731

---

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Claims:**

Please amend the claims as follows:

21. (Amended) A target scanning apparatus, comprising:
- a housing having generally horizontal top and bottom sides, generally vertical left and right sides, said sides extending longitudinally between generally vertical front and rear ends;
  - a scanning system mounted in said housing and having a reflector with a variable shape arcuate convex reflective surface, a light source providing a light beam to said reflector, and a control system adapted to control said shape of said reflector;
  - a mirror displaced from said reflector in said housing near one of said front and rear ends;
  - and
  - an aperture in one of said sides near said one of said front and rear ends;
- said reflector reflecting a first portion of said light beam onto said mirror, and said mirror being oriented so as to reflect a second portion of said light beam from said reflector through said aperture and onto said target, and said control system varying the shape of said reflector whereby said second portion of said light beam scans at least a portion of said target, whereby said light beam is expanded by the mirror.
22. (Amended) The apparatus of claim 21, wherein said mirror has a convex arcuate reflective surface [, whereby said light beam is expanded].